

REMARKS

This is intended as a full and complete response to the Office Action dated May 28, 2003, having a shortened statutory period for response set to expire on August 28, 2003. Claims 15-16, 26-28, and 30-39 remain pending in the application and are shown above. Claims 15, 26, 31-32, 36, and 38 are amended to correct matters of form and to clarify the invention. These amendments are not presented to distinguish a reference; thus, the claims as amended are entitled to a full range of equivalents if not previously amended to distinguish a reference. Applicants have added new claims 40-48. No new matter has been added. Claims 15-16, 26-28, and 30-39 are rejected. Please reconsider the claims pending in the application for reasons discussed below.

Claims 15-16, 26-28, 30-32, and 34-35 stand rejected under 35 USC § 103(a) as unpatentable over *Delano* (U.S. Patent Number 4,100,968) in view of WO 98/11322. Regarding claims 15-16, 36-37, and 38-39, the Examiner states that *Delano* teaches a body (44, 46, and 48) connected to a top drive, a set of gripping elements (126 and 128) that is radially displaceable to drivingly engage a tubular so the tubular is threaded into another tubular until adequately tightened, and a sealing packer that prevents fluid from escaping from the tubular. The Examiner states that *Delano* teaches all of the elements of the above claims except for the gripping element being radially displaced by hydraulic or pneumatic fluid directly applied thereto. The Examiner then states that WO 98/11322 teaches a gripping element (11 and 15) in Figure 6 that is radially displaced by the direct application of hydraulic fluid. The Examiner then concludes that it would have been obvious to one of ordinary skill in the art to have applied hydraulic or pneumatic fluid directly to the gripping element, as taught in WO 98/11322, to have had direct control over the amount of frictional connection between the gripping element and the tubular.

Regarding claims 26-30, the Examiner states that *Delano* teaches a body (44, 46, and 48) connected to a top drive and a set of gripping elements (126 and 128) that is radially displaceable to drivingly engage a tubular so the tubular is threaded into another tubular until adequately tightened. Referring to Figure 3, the Examiner states that the gripping elements are located in a recess in the outer surface of body portion 44. The Examiner states that although *Delano* discloses the gripping elements

displaceable by pneumatic fluid, *Delano* does not teach the gripping element being radially displaced by hydraulic or pneumatic fluid directly applied thereto. The Examiner then states that WO 98/11322 teaches a gripping element (11 and 15) in Figure 6 that is radially displaced by the direct application of hydraulic fluid. The Examiner then concludes that it would have been obvious to one of ordinary skill in the art to have applied hydraulic or pneumatic fluid directly to the gripping element, as taught in WO 98/11322, to have had direct control over the amount of frictional connection between the gripping element and the tubular.

Regarding claims 31-35, the Examiner states that *Delano* teaches a top drive, a body having multiple sections (44, 46, and 48), and a recess disposed about the outer surface of second section 46. Referring to Figure 4, the Examiner then states that a pair of radially extendable gripping elements (168 and 170) is located in the recess. The Examiner admits that the gripping elements 168 and 170 are not radially expandable with pressurized hydraulic or pneumatic fluid, but uses the gripping elements 126 and 128 to conclude that it would have been obvious to one of ordinary skill in the art to have used hydraulically or pneumatically actuated gripping elements 126 and 128 in place of the gripping elements 168 and 170 to more accurately control the gripping elements. The Examiner then uses a further reference, WO 98/11322, to teach directly displacing the gripping elements. The Examiner then states that WO 98/11322 teaches a gripping element (11 and 15) in Figure 6 that is radially displaced by the direct application of hydraulic fluid. The Examiner again concludes that it would have been obvious to one of ordinary skill in the art to have applied hydraulic or pneumatic fluid directly to the gripping element, as taught in WO 98/11322, to have had direct control over the amount of frictional connection between the gripping element and the tubular.

Applicants respectfully traverse the rejection of claims 15-16, 26-28, 30-32, and 34-35. *Delano* does not teach delivering fluid pressure directly to the inner surfaces of a plurality of gripping elements disposed within a plurality of recesses within the body. Using the elements in *Delano* suggested by the Examiner to designate elements of the claims of the Applicants, the gripping elements 126 and 128 of Figure 3 are not directly actuated by fluid pressure. Furthermore, fluid pressure is not applied to an inner

surface of the gripping elements 126 and 128. Rather, a piston 146 and a slip cage 148 move downwardly in response to pressurized air in the piston recess 144. See *Delano*, column 4, lines 65-68. Downward movement of the slip cage 148 causes frustoconical sections 124 to act to cam slip segments 126 and 128 outwardly. See *Delano*, column 5, lines 11-15. Therefore, fluid pressure is not applied to an inner surface of the gripping elements 126 and 128, but is applied to the piston and the frustoconical sections 124 are applied to the inner surface of the gripping elements 126 and 128.

Similarly, using the elements in *Delano* suggested by the Examiner to designate elements of the claims of the Applicants, the gripping elements 168 and 170 of Figure 4 are not actuated by fluid pressure at all, much less actuated by fluid pressure applied to an inner surface (see 176) of the gripping elements or by fluid directly applied to the gripping elements 168 and 170. Instead, the tong dies 168 and 170 are radially advanced by relative rotation of the body 160 and cam 180 relative to the tong dies 168 and 170. See *Delano*, column 5, lines 24-28.

WO 98/11322 does not disclose a plurality of rigid gripping elements disposed in substantially the same axial plane. Only one catcher 11 and only one preshaped bellows 15 is disclosed in Figure 6 of WO 98/11322. Furthermore, WO 98/11322 does not teach a plurality of recesses within the body. The preshaped bellows 15 does not extend from a recess within the body. Additionally, WO 98/11322 does not disclose a plurality of rigid gripping elements. The preshaped bellows 15 is not a rigid gripping element, but is instead constructed of an elastomeric material such as rubber or plastics. See WO 98/11322, page 6, lines 4-7. Moreover, when using the catcher 11 of Figure 6 of WO 98/11322 to designate the gripping element, WO 98/11322 does not disclose fluid pressure directly applied to an inner surface of the plurality of gripping elements, as only the preshaped bellows 15, and not fluid, is directly applied to the catcher 11.

Applicants respectfully traverse the rejection on grounds that the Examiner has not established a *prima facie* case of obviousness. To establish *prima facie* obviousness of a claimed invention, all claim limitations must be taught or suggested by the prior art. See *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Further, the Examiner must *particularly* identify any suggestion, teaching or motivation from

within the references to combine the references (emphasis added). See *In Re Dembiczak*, 50 USPQ2d 1614 (Fed. Cir. 1999).

The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, not in the applicants' disclosure. See M.P.E.P. § 2143, citing *In re Vaack*, 947 F.2d 488 (Fed. Cir. 1991). There is no reasonable expectation that the slip segments 126, 128 of *Delano* could be successfully replaced by the hydraulically activated catcher of WO 98/11322 without adversely affecting its intended operability. Specifically, there is no reasonable expectation from *Delano* or WO 98/11322 that the preshaped bellows 15 of WO 98/11322 could be effectively segmented to provide a plurality of gripping elements disposed within a plurality of recesses disposed in substantially the same axial plane when substituted for the slip segments 126 and 128 or the tong dies 168 and 170 of *Delano*. The elastomeric material of the preshaped bellows 15 with the fluid therein would have to be segmented circumferentially to provide a plurality of gripping elements in substantially the same axial plane. Therefore, how to successfully combine *Delano* and WO 98/11322 to obtain the claimed invention would not have been obvious to one of ordinary skill in the art. Accordingly, withdrawal of the rejection and allowance of the claims is respectfully requested.

Therefore, *Delano*, alone or in combination with WO 98/11322 or any other reference, does not teach, show, or suggest an apparatus for connecting tubulars using a top drive, comprising a body connectable to the top drive; a plurality of rigid gripping elements radially displaceable by hydraulic or pneumatic fluid directly applied to an inner surface of each gripping element to drivingly engage a tubular to permit a screw connection between the tubular and a further tubular to be tightened to a required torque, the plurality of gripping elements disposed within the body in substantially the same axial plane with one another; and a sealing packer to inhibit, in use, fluid in the tubular from escaping therefrom, as recited in claim 15 and its dependent claim 16. Also, *Delano*, alone or in combination with WO 98/11322 or any other reference, does not teach, show, or suggest an apparatus for connecting tubulars, comprising a top drive; a body connectable to the top drive; and a plurality of recesses disposed within an outer surface of the body, wherein each recess houses a rigid gripping element,

wherein each gripping element is radially displaceable outward from each recess by hydraulic or pneumatic fluid directly applied to an inner surface thereof to engage a first tubular, as recited in claim 26 and its dependent claims 27-30. Additionally, *Delano*, alone or in combination with WO 98/11322 or any other reference, does not teach, show, or suggest an apparatus for connecting tubulars, comprising a top drive; a body having a first and second section; a plurality of recesses disposed within an outer diameter of the second section and disposed in substantially the same axial plane with one another; and a rigid gripping element disposed within each recess, wherein each gripping element is radially extendable with pressurized hydraulic or pneumatic fluid directly applied to its inner surface, as recited in claim 31 and its dependent claims 32-35. Moreover, *Delano*, alone or in combination with WO 98/11322 or any other reference, does not teach, show, or suggest an apparatus for connecting tubulars using a top drive, comprising a body connectable to the top drive; a plurality of rigid gripping elements disposed in substantially the same axial plane and radially displaceable from a plurality of recesses within the body by pressurized fluid directly applied to an inner surface thereof, the plurality of gripping elements gripping a tubular torsionally to tighten a screw thread on the tubular and gripping the tubular axially to carry the weight of the tubular; and a sealing packer to prohibit pressurized fluid in the tubular from escaping therefrom, as recited in claim 36 and its dependent claim 37. *Delano*, alone or in combination with WO 98/11322 or any other reference, does not teach, show, or suggest an apparatus for connecting tubulars using a top drive, comprising a body connectable to said top drive; a plurality of rigid gripping elements disposed within a plurality of recesses within an outer surface of the body in substantially the same axial plane with one another; a fluid communication path for delivering fluid pressure directly to the inner surfaces of the plurality of gripping elements, the fluid pressure radially displacing the plurality of gripping element to grip an inner surface of a tubular; and a sealing packer to prohibit pressurized fluid in the tubular from escaping therefrom, as recited in claim 38 and its dependent claim 39. Applicants therefore respectfully request withdrawal of the rejection to claims 15-16, 26-28, 30-32, and 34-35.

Applicants have added new claims 40-48. Claim 40 is dependent upon claim 15, claim 41 is dependent upon claim 26, claims 42 and 43 are dependent upon claim 38,

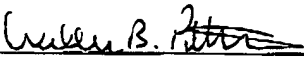
and claim 44 is dependent upon claim 43. Therefore, Applicants respectfully submit that claims 40-44 are allowable for at least the same reasons as claims 15, 26, 38, and 43 are allowable, as discussed above.

Regarding new claims 45-48, *Delano*, alone or in combination with WO 98/11322 or any other reference, does not teach, show, or suggest a method for manipulating tubulars, comprising providing a gripping apparatus comprising a body having a plurality of recesses circumferentially spaced therein, the recesses in substantially the same axial plane, and a plurality of rigid gripping elements disposed within the plurality of recesses; radially extending the plurality of gripping elements to grippingly engage an inner surface of a tubular by introducing pressurized fluid directly behind the plurality of gripping elements; rotating the tubular with a top drive connected to the body; and lowering the tubular into a wellbore, as recited in claims 45-48. Applicants therefore respectfully request allowance of claims 45-48.

In conclusion, the references cited by the Examiner, alone or in combination, do not teach, show, or suggest the invention as claimed. The secondary references made of record are noted. However, it is believed that the secondary references are no more pertinent to Applicants' disclosure than the primary references cited in the office action. Therefore, Applicants believe that a detailed discussion of the secondary references is not necessary for a full and complete response to this office action.

Having addressed all issues set out in the office action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request allowance of the claims.

Respectfully submitted,



William B. Patterson
Registration No. 34,102
MOSER, PATTERSON & SHERIDAN, L.L.P.
3040 Post Oak Blvd. Suite 1500
Houston, TX 77056
Telephone: (713) 623-4844
Facsimile: (713) 623-4846
Agent for Applicant(s)